AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

- 1. (CANCELLED)
- 2. (CURRENTLY AMENDED) The method according to claim 1, wherein the step of determining the crank position includes the step of A method for determining an angular position, at startup, of an internal combustion engine having a crankshaft and a camshaft each including a plurality of position indicating teeth, said method comprising the steps of:

determining a crankshaft position by sensing the plurality of position indicating teeth on said crankshaft; and

determining a crankshaft phase position, comprising the steps of:

setting a sample size of the engine cycle in each of two
concurrent engine cycles;

assigning a predetermined amount of said plurality of teeth of said camshaft as marked teeth;

counting the marked teeth of said plurality of teeth on said camshaft found in said sample sizes; and

determining said crankshaft phase position according to the marked teeth appearing in said sample sizes.

- 3. (ORIGINAL) The method according to claim 2, wherein said predetermined amount of marked teeth is 3.
- 4. (ORIGINAL) The method according to claim 3, wherein the step of determining the crank position includes the step of identifying a single marked cam tooth within said sample sizes.

5. (CANCELLED)

6. The method for determining the position of a crankshaft relative to a camshaft throughout an engine cycle of an internal combustion engine of claim 5, wherein the step of identifying an amount of said plurality of teeth includes the step of A method for determining an angular position of an internal combustion engine having a rotating crankshaft and a rotating camshaft each including a plurality of position indicating teeth, said method comprising the steps of:

assigning a portion of a first and second concurrent engine cycle as a first and second reference window;

assigning a predetermined amount of said plurality of teeth as marked teeth;

identifying an amount of said plurality of marked teeth of said rotating camshaft

within said first and second reference window; and

determining the position of said rotating crankshaft based on the amount of marked teeth identified within said first and second reference windows.

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- 7. (CURRENTLY AMENDED) The method for determining the position of a <u>rotating</u> crankshaft relative to a <u>rotating</u> camshaft throughout an engine cycle of an internal combustion engine of claim 6, wherein said predetermined amount of marked teeth is 3.
- 8. (CURRENTLY AMENDED) The method for determining the position of a <u>rotating</u> crankshaft relative to a <u>rotating</u> camshaft throughout an engine cycle of an internal combustion engine of claim 7, wherein the step of determining the position of said <u>rotating</u> crankshaft includes the step of identifying a single marked tooth of said <u>rotating</u> camshaft in said first and second reference windows.